NFPA

HMIS

Health Hazard	2
Fire Hazard	3
Reactivity	0

PPE (See Section 15)

Section 1. Chemical Product and Company Identification

Trade Name: Cobalt Test

Manufacturer: Haztech Systems, Inc.
PO Box 929
Mariposa, CA 95338

Commercial Name

Synonyms

Chemcal Family

Chemical Formula: CH3OH, NaCNS

Supplier: Spectrum Chemical Mfg. Corp.
14422 S. San Pedro St.
Gardena, CA 90248

Part #: RE2029

CAS #: 67-56-1 / 540-72-7

RTECS: PC1400000 / XL2275000

TSCA: TSCA 8(b) inventory:
methyl alcohol
sodium thiocyanate

CI #

In case of emergency contact CHEMTREC (24 hours) at 800-424-9300

HazTech Systems, Inc. 800-543-5487

Spectrum Chemical Mfg. Corp. 310-516-8000

Section 2. Composition and Information on Ingredients

Name	CAS #	Exposure Limits TWA (mg/m3)	STEL	CEIL (mg/m3)	% by Weight
Methyl alcohol	67-56-1	260	325		79%
Sodium thiocyanate	540-72-7				21%

Toxicological Data on Ingredients

Methyl alcohol:
ORAL (LD50): Acute: 5628 mg/kg (Rat.).
DERMAL (LD50): Acute: 15800 mg/kg (Rabbit.).

Sodium thiocyanate :
ORAL (LD50): Acute: 764 mg/kg (Rat). 362 mg/kg (Mouse).

Section 3. Hazards Identification

Potential Acute Health Effects: Very hazardous in case of ingestion. Hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation. Slightly hazardous in case of skin contact (permeator). Severe over-exposure can result in death.

Potential Chronic Health Effects: CARCINOGENIC EFFECTS: Classified 4 (No evidence.) by NTP, None. by OSHA.
MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Classified POSSIBLE for human.
DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Development toxin [POSSIBLE].
The substance is toxic to the nervous system, gastrointestinal tract, eyes.
The substance may be toxic to blood, kidneys, lungs, the reproductive system, liver, heart, brain, cardiovascular system, skin, central nervous system (CNS), pancreas.
Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4. First Aid Mearsures

Eye Contact	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used.Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion	If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Section 5. Fire and Explosion Data

Flammability	Flammable. (methanol)
Auto-Ignition Temperature	464°C (867.2°F) (methanol)
Flash Point	CLOSED CUP: 12°C (53.6°F). OPEN CUP: 16°C (60.8°F). (methanol)
Flammable Limits	LOWER: 6% UPPER: 36.5% (methanol)
Products of Combustion	These products are carbon oxides (CO, CO2). Some metallic oxides.
Fire Hazards in Presence of Various Substances	Highly flammable in presence of open flames and sparks, of heat, of combustible materials.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions	Flammable liquid, soluble or dispersed in water. SMALL FIRE: Use DRY chemical powder.
Special Remarks on Fire Hazards	CAUTION: MAY BURN WITH NEAR INVISIBLE FLAME. Explosive when mixed with Choroform + sodium methoxide and diethyl zinc. It boils violently and explodes.

Section 6. Accidental Release Measures

Small Spill	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Section 7. Handling and Storage

Precautions	Keep away from sources of accidental ignition. Do not ingest. Do not breathe gas/fumes/ vapor/spray. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.
Storage	Keep in HazCat Kit.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Use in a well ventilated area.
Personal Protection	Gloves and goggles.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Clear liquid	Volatility	Not available.
Molecular Weight	Not available	Odor Threshold	Not available
pH (1% Solution in Water)	Not available	Water/Oil Dist. Coeff.	Not available.
Boiling Point	64.5°C (148.1°F) (methanol)	Ionicity (in Water)	Not available
Melting Point	Not available	Dispersion Properties	See solubility in water, methanol.
Critical Temperature	Not available	Solubility	Easily soluble in water, methanol.
Specific Gravity	Not available	Odor	Alcohol like.
Vapor Pressure	Not available	Taste	Not available.
Vapor Density	Not available	Color	Colorless.

Section 10. Stability and Reactivity Data

Stability	Product is stable.	Corrosivity	Non-corrosive in presence of glass.
Instability Temperature	Not available.	Special Remarks on Corrosivity	Not available.
Conditions of Instability	Not available.	Polymerization	Will not polymerize.

Incompatability with Various Substances: Highly reactive with oxidizing agents. Reactive with metals.

Special Remarks on Reactivity: Violent reaction with alkyl aluminum salts, acetyl bromide, chloroform + sodium methoxide, chromic anhydride, cyanuirc chlorite, lead perchlorate, phosphorous trioxide, nitric acid. Exothermic reaction with sodium hydroxide + chloroform. Incompatible with beryllium dihydride, metals (potassium and magnesium), oxidants (barium perchlorate, bromine, sodium hypochlorite, chlorine, hydrogen peroxide), potassium tert-butoxide, carbon tetrachloride, metals (aluminum, magnesium, zinc), and dichlormethane. May attack some plastics, rubber, and coatings.

Section 11. Toxicological Information

Route of Entry: Absorbed through skin. Eye contact. Inhalation. Ingestion. Methanol: Acute

Toxicity to Animals: oral toxicity (LD50): 5628 mg/kg (Rat.). Acute dermal toxicity (LD50): 15800 mg/kg (Rabbit.). Acute toxicity of the vapor (LC50): 64000 4 hours (Rat.). Sodium thiocyanate: Acute oral toxicity (LD50): 362 mg/kg (Mouse).
Very hazardous in case of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).

Chroinc Effects on Humans: CARCINOGENIC EFFECTS: Classified 4 (No evidence.) by NTP, None. by OSHA. TERATOGENIC EFFECTS: Classified POSSIBLE for human. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Development toxin [POSSIBLE].
Causes damage to the following organs: the nervous system, gastrointestinal tract, eyes. May cause damage to the following organs: blood, kidneys, lungs, the reproductive system, liver, heart, brain, cardiovascular system, skin, central nervous system (CNS), pancreas. Causes damage to the following organs: lungs, mucous membranes.

Other Toxic Effects on Humans: Very hazardous in case of ingestion. Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).

Special Remarks on Toxicity to Animals: Not available.
Special Remarks on Chronic Effects on Humans: Not available.
Special Remarks on Other Toxic Effects on Humans: Not available.

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products mayarise.
Toxicity of the Products of Biodegradation	The products of degradation are more toxic.
Special Remarks on the Products of Biodegradation	Not available.

Section 13. Disposal Considerations

Waste Disposal Recycle to process, if possible. Consult your local or regional authorities.

Section 14. Transport Information

DOT Classification	CLASS 3: Flammable liquid.
Identification	Methanol, 3, UN1230, II
Special Provisions for Transport	Not available.

Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations	Rhode Island RTK hazardous substances: Methyl alcohol Pennsylvania RTK: Methyl alcohol Minnesota: Methyl alcohol Massachusetts RTK: Methyl alcohol New Jersey: Methyl alcohol California Directors List of Hazardous Substances (8CCR 339): Methyl alcohol Tennesse Hazardous Right to Know : Methyl alcohol TSCA 8(b) inventory: Methyl alcohol SARA 313 toxic chemical notification and release reporting: Methyl alcohol CERCLA: Hazardous substances.: Methyl alcohol: 5000 lbs. (2268 kg) TSCA 8(b) inventory: Sodium thiocyanate
California Proposition 65 Warnings	
Other Regulation	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.
Other classifications	WHMIS (Canada) CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC). CLASS D-2A: Material causing other toxic effects (VERY TOXIC). CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). DSCL (EEC) R11- Highly flammable. R23/24/25- Toxic by inhalation, in contact with skin and if swallowed. R22- Harmful if swallowed. R36/38- Irritating to eyes and skin.

Section 16. Other Information

Part Number(s)	RE2029
References	Not available.
Other Special Considerations	Not available.
Validated by	R. Houghton 10/9/02
Verified by	R. Turkington

Call 1-800-543-5487

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Haztech Systems, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.